

## **Background review of elementary group theory**

Chapter 9 of Schaum's Outline of Abstract Algebra (Second Edition) contains most if not all the material we need about groups, at least up to the discussions of groups in Munkres and Hatcher.

### **References for the structure theory of finitely generated abelian groups and homomorphisms of finitely generated free abelian groups**

Here are two online references:

<https://web.math.rochester.edu/people/faculty/jonpak/N9.pdf>

Fairly complete account of the structure theorem but does not contain the standard approach to homomorphisms of finitely generated free abelian groups.

<http://web.science.mq.edu.au/~chris/groups/CHAP10%20Finitely-Generated%20Abelian%20Groups.pdf>

Only the first four sections plus the exercises need to be reviewed. This reference includes material on homomorphisms which does not appear in the first reference.